

Mendip Market Towns: Wells

Future Cycle Network Mapping

August 2012



Future Network Mapping — Wells

For enquiries about this reports or cycling within Somerset please contact Somerset County Council.

Strategic Planning
Somerset County Council
County Hall (PPC702)
Taunton
TA1 4DY
0845 345 9155
transportpolicy@somerset.gov.uk

Report authorship and contributors

Rupert Crosbee, Sustrans

John Grimshaw, John Grimshaw Associates

Martin Whitfield, Cycle City Guides

Bob Murrel, LEGS; Dick Hodgson

Sustrans is the UK's leading sustainable transport charity.

Our vision is a world in which people choose to travel in ways that benefit their health and the environment. We work on practical, innovative solutions to the transport challenges facing us all. Sustrans is the charity behind the award winning National Cycle Network, Safe Routes to Schools, Bike It, TravelSmart, Active Travel, Connect2 and Liveable Neighbourhoods, all projects that are changing our world one mile at a time.

To find out more visit or call: www.sustrans.org.uk 0845 113 00 65

Head Office
Sustrans
2 Cathedral Square
College Green
Bristol
BS1 5DD

Registered Charity No. 326550 (England and Wales) SC039263 (Scotland)
VAT Registration No. 416740656

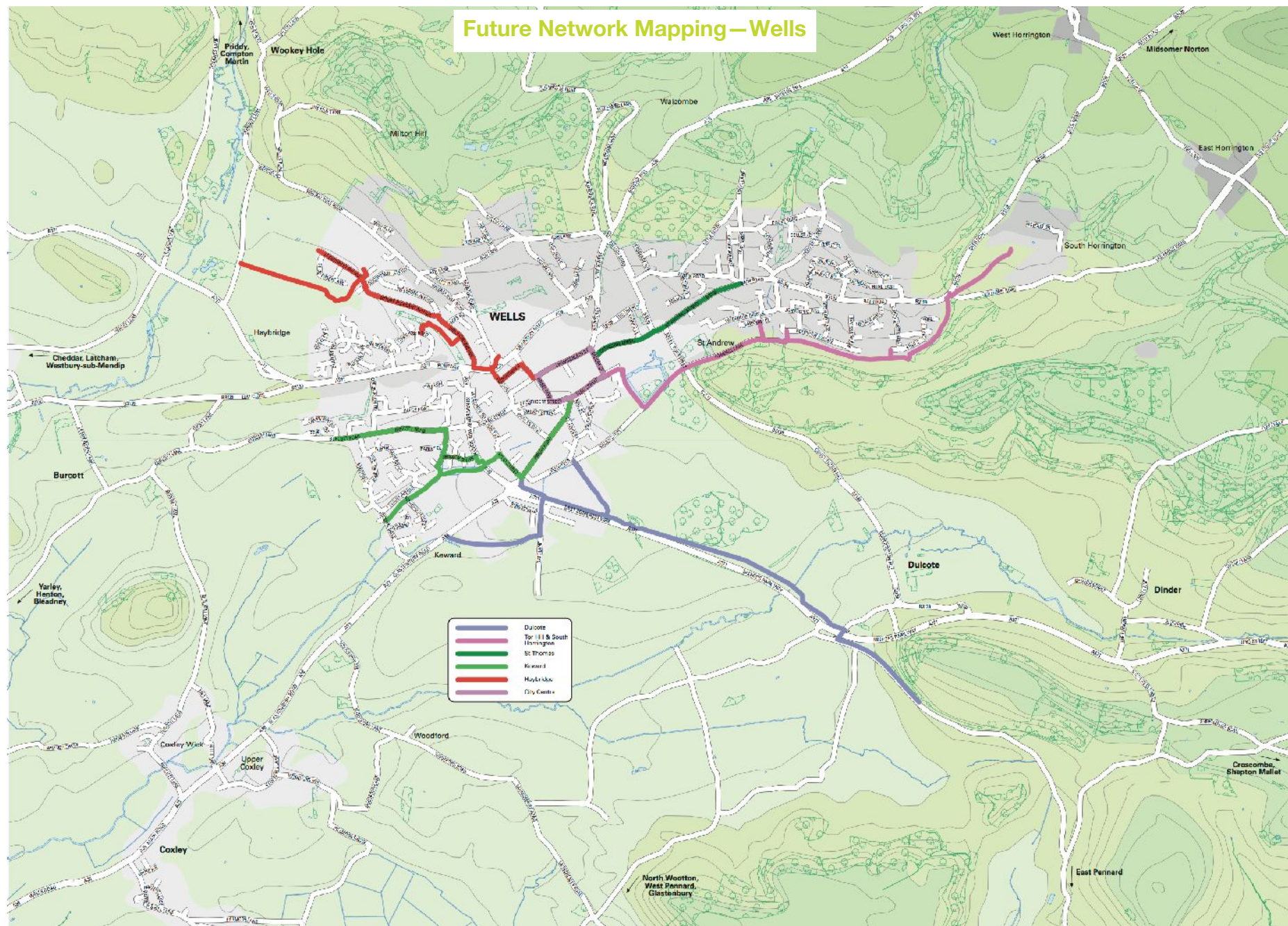
Table of contents

	Page
Executive Summary	1
Introduction	3
1. Existing cycle provision	8
2. Future Network Routes	13
2.1.City Centre	13
2.2. Tor Hill and South Horrington	15
2.3. Dulcote	21
2.4. Keward	25
2.5. Haybridge	30
2.6. St Thomas	36

Wells Future Cycle Network—Executive Summary

- i. This report sets out the vision for the development of a network of routes for cyclists in Wells and indicates how this can be achieved.
- ii. Wells is a compact settlement which is quite level. Local journeys are practicable by cycling yet at 2% levels of cycling are low compared to some Somerset towns. As the city expands it will become more and more important that journeys are switched from private car to other modes, and encouraging cycling will be a part of that process.
- iii. The barriers to cycling at present would appear to be primarily the busy road network which surrounds the city, the constrained and busy arterial routes, and the impermeability of the city centre to cyclists.
- iv. The level of traffic experienced, the constrained nature of the highway network and one way streets combine to create a barrier to direct and convenient access for cyclists
- v. The recommended network aims to overcome these issues and create conditions which will enable cyclists, whether novice, returning to cycling or experienced, to travel in the city comfortably and conveniently.
- vi. The network, shown in outline opposite, comprises a number of radial routes with links to the principal residential areas and trip attractors. Radial routes serve to link the centre with surrounding development, and across the centre.
- vii. The network is described on the following pages, and outlined here.
 - 1. **City Centre**—Proposals to reduce traffic, and improve permeability.
 - 2. **Tor Hill and South Horrington route**—A traffic free route based on existing facilities serving a large proportion of residents on the east side of the city; a route capable of changing perceptions of cycling as a means of transport.
 - 3. **Dulcote route**—Serving an outlying village and a future employment site. Based on existing facilities, links also to future development areas on the south side of the centre.
 - 4. **Keward route**—Largely traffic free route providing access on-road to main residential areas west of the centre, and improving access to the centre on-road.
 - 5. **Haybridge route**—Improves the important crossing of the Portway, and a link to the Blue School. Serves housing areas north-west of the centre.

Future Network Mapping—Wells



Future Network Mapping—Wells

Introduction

- xiii. Sustrans have been commissioned by Somerset County Council to produce an audit of the existing cycle network in Wells, recommendations for enhancements to the existing network, and to map and report on recommendations for a cycle network for the future to cater for existing and expected increasing demand as the town develops.
 - xiv. This report sets out Sustrans' vision for a future cycle network for Wells, the key issues to be addressed, shows an indicative alignment of future routes in the network, constraints on deliverability and estimates the work required to deliver the route.
 - xv. The recommendations in this report will help to shape Somerset County Council's Future Network Map for Wells. The Future Network Map will be part of SCC's adopted policies on cycling and used to influence the future development of the cycle network in Wells. A proposals inclusion in this report does not represent an endorsement or delivery commitment by SCC.
- 1. Convenient—serving main destinations, benefitting cyclists through directness or reduced delay, signed, lit and well maintained.
 - 2. Accessible—linking to destinations; continuous, overcoming barriers; access to areas not available to motorists.
 - 3. Safe—safe and perceived to be safe
 - 4. Comfortable—meeting design standards for width gradient and surface quality and catering for all types of user.
 - 5. Attractive—a pleasant environment integrated in surrounding areas; a social space.
- xv. The network will aim to meet the needs of different categories of cyclist, but the existing road network will remain the primary network for experienced cyclists.

Issues

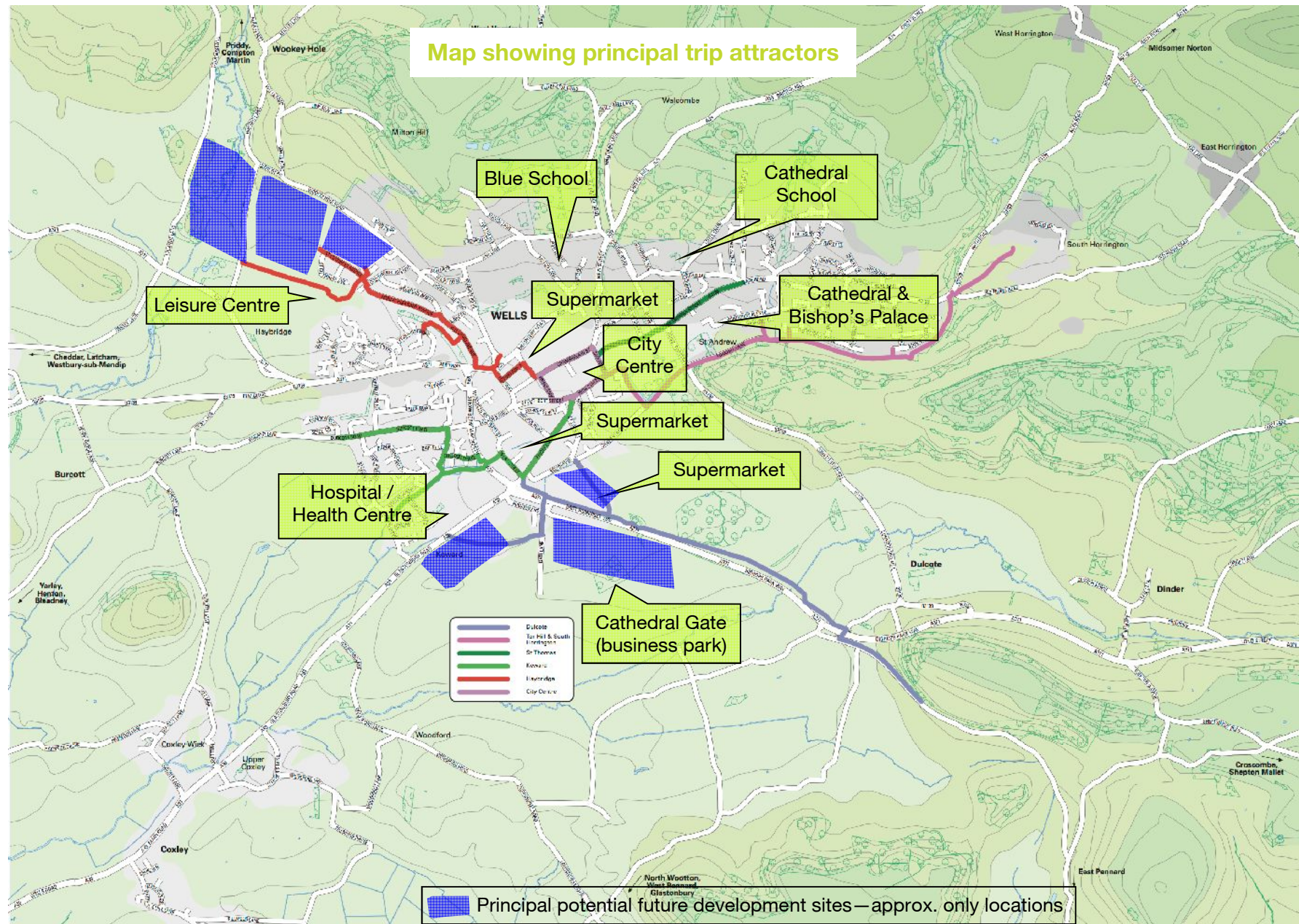
The vision

- xiii. To make travel by cycle possible and desirable for the people of Wells.
 - xiv. To achieve this the future cycle network will create a network of routes for cyclists which meets the five core principles of network design (Local Transport Note 02/08 Cycle Infrastructure Design):
- xvi. Wells is a compact settlement on the southern foot of the Mendip Hills, slightly climbing the lower slopes, but principally developed over the level land on an east / west axis along the foot of the slope. The city is the ancient seat of the Bishop of Bath and Wells, and the Cathedral, Bishop's Palace and the city centre attract high numbers of visitors for recreation and shopping.
 - xvii. The population of Wells is housed largely to the east and west of the city centre, so that most journeys terminate in or cross the city centre on the east west axis.

Future Network Mapping—Wells

- xviii. The following map shows the principal trip attractors in Wells, and the areas which are in the early stages of development or are identified in the local core strategy as future potential development sites.
- xix. Wells services a significant outlying population for education, employment, health and shopping. The city is expected to expand to the south and west through development of residential and commercial sites, and there are likely to be infill developments within the city centre and periphery.
- xx. Although travel distances within the city are short, there are a number of issues which discourage high levels of cycling.
 - 1. The streets in the city centre, Sadler Street, High Street, St Cuthbert Street, Priest Row, are one way for traffic in a clockwise circulation. This arrangement reduces permeability of the centre for cyclists, adding to the journey distance for access to local services. It is common to see cyclists moving against the traffic direction to overcome this inconvenience.
 - 2. Sadler Street and High Street are bounded by gutters fed by spring water and the streets have been attractively resurfaced with high quality stone edging and paving. High Street is a popular shopping street and the footways are frequently very busy, and walking on the carriageway is common. Although traffic speeds are low (20 mph zone).
 - 3. The centre is bounded to north, west and south by the A39 and A371, busy roads with few satisfactory crossing points for cyclists.
 - 4. Arterial roads which serve local housing are heavily trafficked and of constrained width creating an intimidating environment for cyclists.
- xxi. The future network seeks to address these issues by identifying routes and measures which encourage local people to travel by cycle for everyday journeys.
- xxii. Access to Wells' principal trip attractors, such as schools, supermarkets, and the cathedral is often made by car from the main arterial roads, which are not attractive routes for cycling. All the attractors are however also accessible from nearby roads or paths which are cycle friendly, or could be improved as outlined below.
- xxiii. The main attractors, except the leisure centre, as can be seen on the map, are clustered round the city centre, and the residential areas, from which most journeys originate, ring the centre. It is reasonable to assume that most journeys will be from outskirts to centre and vice versa.
- xxiv. The network as set out aims to connect the more densely populated areas of housing to the main attractors by means of routes which will be convenient and attractive so that local people will prefer to make these journeys by cycle (or on foot) rather than driving. The network which emerges from this approach creates a parallel network of routes for cyclists which reflects the main arterial road network, and the desire lines for local travel.
- xxv. The arterial routes are designed to serve the main residential areas, and are accessed via the existing network of residential roads, without the need to move along main roads which have not been designated as cycle routes.
- xxvi. There have been only two recorded incidents on highway involving cyclists in the last three years, both collisions of cycles and cars. There is no apparent hot-spot for incidents.

Future Network Mapping—Wells



Design principles

xxvii. There are a number of features which should be common to network routes:

1. Signing—the routes proposed serve the main residential areas of Wells and we have suggested they are named according to their destination, e.g. Haybridge Route. Signage along the route could thus carry this uniform style, while highlighting other destinations on the route e.g. Leisure Centre. Directional signage should accord with National Cycle Network guidance, and include destinations and distances (or travel times) at key junctions.
2. Advanced Stop Lines(ASL)—ASL are a significant contribution to cycle safety allowing cyclists to position themselves in good view of motorists at traffic lights, and gain advantage in traffic queues. Unless there are over-riding reasons not to, ASL should be considered for all light controlled junctions.
3. Cyclists dismount / end of route signs—Generally these indicate an inadequate route for cyclists, and they should only be used where necessary in accordance with LTN 02/08 guidance.

xxviii. It should be noted that the interventions in this report are subject to detailed engineering input and processes including but not limited to road safety audits, risk assessments and technical audits.

Format of report

xxx. The following pages describe the routes section by section. Each section is numbered, with a brief commentary, followed by a brief description of recommended interventions; e.g.

2.3. Junction with Bath Road

2.3.2.1 A direct transition from the South Horrington estate gateway to the access point to the Tor Furlong path is possible by widening the existing footways, and it would reduce the gradient for cyclists if the path at the north end of the Tor Furlong were re-aligned to cut across the slope in a north-easterly direction. (3410)

2.3.2.1.1 Widen footways to 3 m.

2.3.2.1.2 New path 3 m wide.

xxxi. At the end of each route description is a summary table setting out the route elements, the nature of interventions recommended, possible abnormal constraints and an assessment of the impact of the section works.

xxxii. Delivery of measures is dependent on the level of the funding streams that are available. Funding mechanisms that could be used to deliver the future network include local government funding, the community infrastructure levy; developer contributions (S106 and S278) as well as central government funding streams if and when these become available. The scale and availability of all these funding streams in the future is currently unclear.

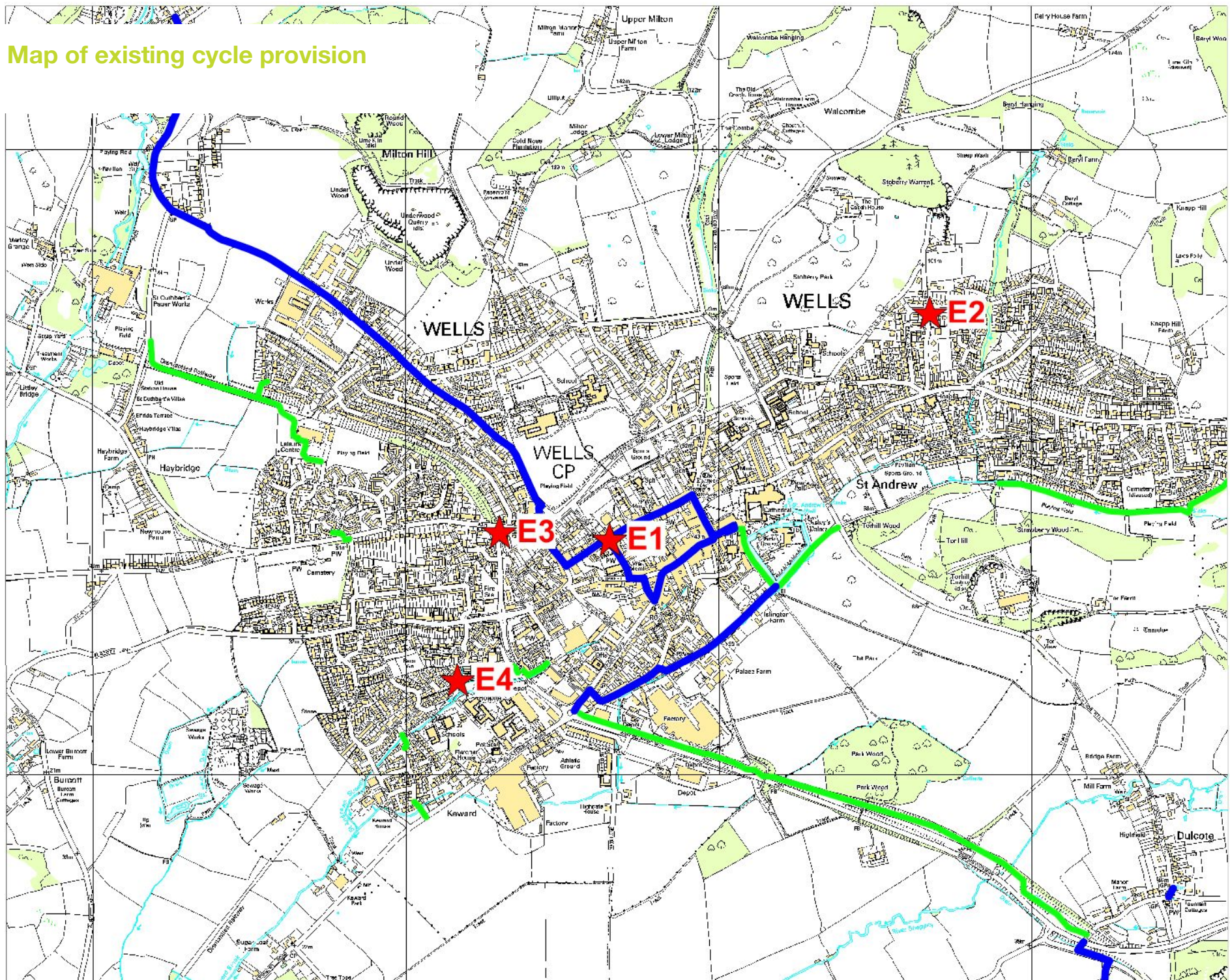
xxxiii. The impact of interventions is based on the expectation of usage by cyclists and the potential for changing behaviour to increase the modal share of cycling.

Future Network Mapping—Wells

xxxiv. The summary of interventions does not include minor works such as flush kerbs or signage. It is assumed that all interventions will conform with appropriate regulations and these are not specified.

xxxv. Traffic Regulation Orders (TRO)—a note is included where TROs will be required. A cost is associated with each TRO referred to but savings will be possible if a number of similar interventions in a locality are included in a single TRO.

Wells Map of existing cycle provision



1 Recommended enhancements to existing provision

1.0 A number of minor measures are recommended to enhance the existing provision for cyclists. These measures are shown and described on the following pages.

1.1 Priest Row / Chamberlain Street junction E1

1.1.1 It is legal for cyclists to travel northeast on Chamberlain Street (with buses and taxis) yet not to turn right from Priest Row. (3391)

1.1.1.1 Add 'except cycles' sign to no right turn sign.

1.1.1.2 Re-model kerb line to assist right turn.



1.2. Beryl Lane crossing E2

1.2.1 Beryl Lane is set approx. 1 m below the level of the latterly constructed Kippax Avenue and Drake Road, and linked only to the latter by a stepped ramp. (3439). It would assist local residents travelling between the Drake Road area and Kippax Avenue, (3444) who have now to descend to St Thomas Street and ascend the hill again, if a direct link could be made across Beryl Lane.

1.2.1.1 Remodel stepped ramp to provide 1:20 slope

1.2.1.2 Create new 1:20 ramp between Kippax Avenue and Beryl Lane.



Future Network Mapping—Wells

1.3. Portway crossing E3

1.3.1 The utility of this zebra crossing which links the communities on either side of the busy Portway A371 would be enhanced if more readily accessible by cycles passing between the two parts of the city.

1.3.1.1 The quiet residential roads on either side of the Portway are suitable for cycling. Access to the crossing from Keward is via Coronation Road, and to improve the link to the Zebra Crossing the footway on the south side could be widened. (3363)

1.3.1.2 The zebra meets an existing footway leading across open space to Stiles Court (3360), which is suitable for widening for shared use subject to protection of trees adjacent to the path.

1.3.2.1 Widen footway to 3m and convert to shared footway / cycleway.

1.3.2.2 Widen footway on Portway for shared use 3 m width.



1.4. Clements Close E4

1.4.1 The new traffic free path, which is not open to motor vehicles, and was created on development of the adjacent house, between Clements Close and Keward Close is occasionally used illegally by motor vehicles. A bollard at the Clements Close access would prevent this and enhance the safety of legitimate users. (3373)

1.4.1.1 New bollard.



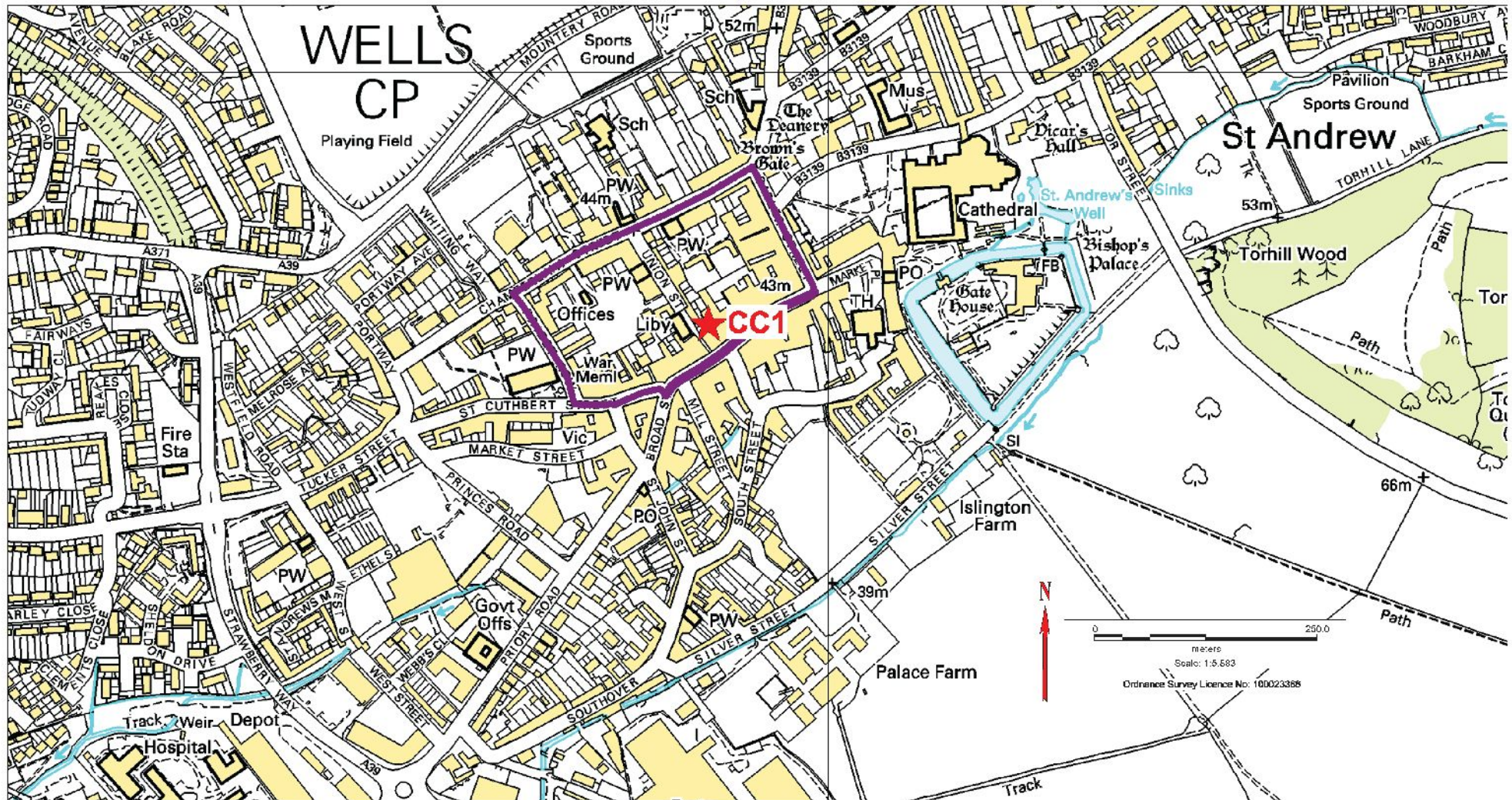
Future Network Mapping—Wells

1 Recommended enhancements to existing network

Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
1.1 Priest Row	E1	<p>1.1.1.1 Add 'except cycles' sign to no right turn sign.</p> <p>1.1.2 Re-model kerb line to assist right turn.</p>		High
1.2 Beryl Lane crossing	E2	<p>1.2.1.1 Remodel stepped ramp to provide 1:20 slope between Beryl Lane and Drake Road</p> <p>1.2.1.2 Create new 1:20 ramp between Kippax Avenue and Beryl Lane.</p>	<p>Services present in highway.</p> <p>Community engagement</p> <p>Ecology / trees</p> <p>Third party land</p>	Low (local value only)
1.3 Portway Crossing	E3	<p>1.3.1.1 50m widen path to 2 metres (1.2 existing width)</p> <p>1.3.1.2 Flush kerb to Stiles Court</p> <p>1.3.1.3 Widen footway south side</p>	<p>Trees / roots</p> <p>Change status of pathway and footway</p> <p>DfT approval process for non-standard zebra crossing</p> <p>Third Party land</p>	Low
1.4 Clements Close	E4	<p>1.4.1.1 Removable bollard at access to traffic free path to Keward Close</p>	<p>Third party land</p>	Medium

2. Future Network Routes

2.1 Wells City Centre



2. Future Network Routes

2.0 Wells City Centre

2.0.1 Like most cycle journeys in Wells, all the network of cycle routes outlined on the following pages terminate or pass through the historic city centre. The issues for cyclists in the city centre have been outlined previously. They centre on the fact that traffic circulation is one way on Sadler Street, High Street, Broad Street, St Cuthbert Street and Priest Row.

2.0.1.1 Traffic management, as evidenced by the treatment of the historic central streets, suggests that it is intended that through traffic does not enter the central street network.

2.0.1.2 The historic centre is rendered less attractive to cyclists by the apparent dominance of motor traffic, especially on busy days when the footways are crowded, forcing pedestrians into the carriageway.

The following should be considered:

2.1 One way network CC1

2.1.0 A risk assessment in line with manual for streets quality auditing process should be given consideration for this layout.

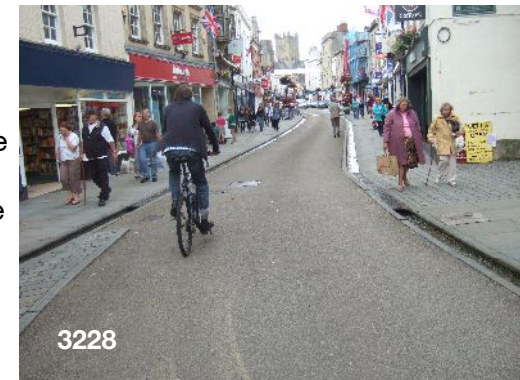
2.1.1 Broad Street, St Cuthbert Street (east of Priest Row), and Priest Row are all one way which is an inconvenience to cyclists.

2.1.1.1 The installation of contra-flows for cyclists should be considered (3225).

2.1.1.2 Cycle exception sign to left turn only from Priest Row to Chamberlain Street (as referred to at 1.1.1.1 E1).

2.1.1.3 Alter kerb line at junction to ease radius (as referred to at 1.1.1.1 E1).

2.1.2 Sadler Street (3233) and High Street (3228) vary in width between gutters carrying the Wells spring water, but narrow to 3 m. The nature of the gutter edges are a hazard which could not be accepted in a cycle contraflow in present conditions. Cycle contraflows would significantly improve permeability for cyclists. Should it be possible to reduce the level of traffic or reduce on street parking in the city centre in the future cycle contraflows may be possible. Further investigation would be required.



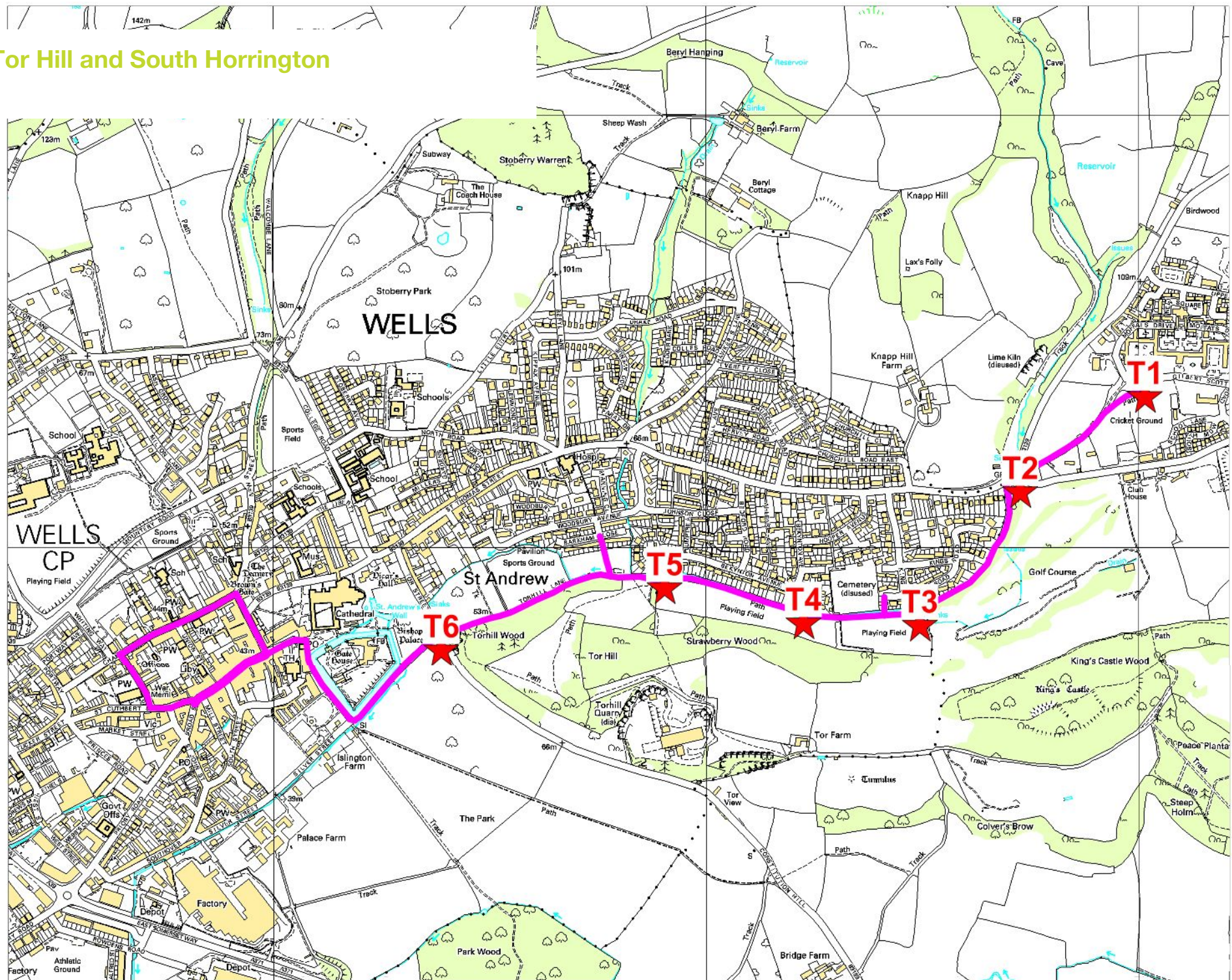
Future Network Mapping—Wells

2.1 City Centre

The city centre routes are common to all the radial routes in the network and have the potential to dramatically enhance the experience of cycling in Wells and send a clear signal that cyclists are welcome in the central area.

Section description	Intervention ID and Summary	Constraints	Impact
1.1 One way network—cycle contra flows where street conditions allow.	<p>CC1</p> <p>1.1.1 Cycle contra flow on Broad Street, Priest Row and St Cuthbert Street (east of Priest Row)</p> <p>1.1.2 Cycle exception sign to left turn only from Priest Row to Chamberlain Street. (see also E1)</p> <p>1.1.3 Alter kerb line</p>	Stakeholder engagement	High

2.2 Tor Hill and South Horrington



Future Network Mapping—Wells

2.2 Tor Hill and South Horrington

2.2.0 This route would form the principal cycle route from the east of the city, serving the population south and north east of St Thomas Street, and South Horrington. As the route is traffic free, direct, and runs through a very attractive environment, it has the potential for high levels of use.

2.2.1 South Horrington T1

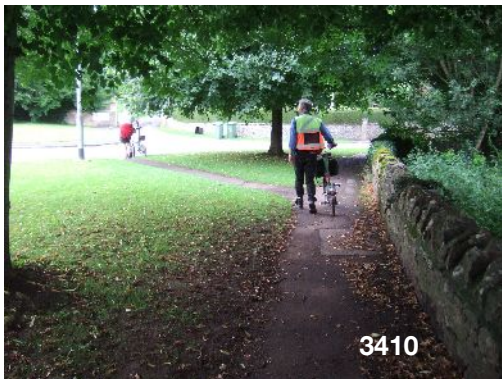
2.2.1.1 This small community on the east of Wells has informal use of the path (3411) and driveway on the alignment shown on the route map.

2.2.1.1.1 New 3 metre wide non-segregated path on north side of cricket ground.

2.2.1.1.2 Legal—formalise use of path and driveway to estate entrance.



2.2.2 Junction with Bath Road T2



2.2.2.1 A direct transition from the South Horrington estate gateway to the access point to the Tor Furlong path is possible by widening the existing footways, across the verge south east of the junction of Bath Road and Old Frome

Road, and it would reduce the gradient for cyclists is the path at the north end of the Tor Furlong were re-aligned to cut across the slope in a north-easterly direction. (3410)

2.2.2.1.1 Widen footways to 3 m.

2.2.2.1.2 New path 3 m wide.

2.2.3 Access point T3

2.2.3.1 The Tor Furlong path is currently accessed by footways at three locations, and those suitable for upgrading from foot to cycle and foot access are shown on the map. (See 5 below). The housing in the area east of the disused cemetery, lying at the foot of the slope, has no direct access to Tor Furlong, and if not provided will not benefit from the path. To achieve the access private land would need to be acquired on the south side of Castle Road towards the western end (to avoid unnecessary ascent).

2.2.3.1.1 Land acquisition.

2.2.3.1.2 Path construction new 3 m wide path including bridge over stream.



Future Network Mapping—Wells

2.2.4 Tor Hill and South Horrington path T4

2.2.4.1 This path is a public footpath over which cycling is currently permitted. There are a number of watercourses nearby and there is severe damage of the compacted stone path surface due to flooding and water erosion. (3408) A sealed surface is essential in this situation to prevent recurrence of flood damage. Towards the western end of the path, vehicular access is permitted and the lane is used for informal parking by commuters and walkers. Access by vehicle is required to the playing fields.

2.2.4.1.1 A short term measure would be to clear drains to ensure free flow.

2.2.4.1.2 Surface full length of path 3 m wide with sealed surface.

2.2.4.1.3 Consider allocating car parking area near junction with Tor Street.

2.2.4.1.4 Consider installing a gate to prevent unauthorised vehicle access east of farm driveway.

2.2.5 Access from Bekynton Avenue and Barkham Close T5

2.2.5.1 There are existing footways serving the Tor Furlong path from the neighbouring residential estates. From Bekynton Avenue (3453) a tarmac surface pathway 1.8 m wide between the house fence and a hedge to a private car park leads to a bridge



with a 3 m wide deck leads to the Tor Furlong path. The path could be widened to 3 m if the hedge were removed; it is unclear whether this would require additional land to be acquired.

2.2.5.1.1 Remove hedge and widen existing path to 3 m with vehicle deterrent at access point.

2.2.5.2 The path from Barkham Close crosses the stream on a stone bridge with a deck width of 0.9 m at its narrowest point. The bridge has historic interest (3456) and need not be altered, being only approx 4 m long.

2.2.5.2.1 The path crosses the recreation ground between a line of trees to a passageway between garages 1.9 m wide. (3460) Widening this section over 25 m is not feasible.

2.2.5.2.2 Widen existing 1.2 m wide path across recreation ground to 3 m. (3457)



2.2.6 Tor Street Crossing T6

2.2.6.1 Tor Street is relatively lightly trafficked and within the 30 mph limit. Parked cars north of the crossing point tend to slow traffic in both directions. The exit from the Cathedral grounds is however an opening in a high stone wall



and visibility of people crossing is very restricted, especially to the north. This could be improved by relocating the exit point to use the traditional gate supplemented by a small build out on the west side of the road to act as traffic calming and enable improved visibility to the north. This would operate as a give way point for inbound vehicles, formalising the current situation where outbound vehicles effectively have priority to pass the line of parked cars.(3398)

2.2.6.1.1 Extend 30mph zone to beyond proposed build out.

2.2.6.1.2 Appropriate priority over oncoming vehicles signage required.

2.2.7 Cathedral Grounds

2.2.7.1 The path alongside the palace moat is 4 m wide.

Future Network Mapping—Wells

2.2 Tor Hill and South Horrington Route

Short term priority route for commuters and utility access to city centre: Bath Road to Market Place, including two links.

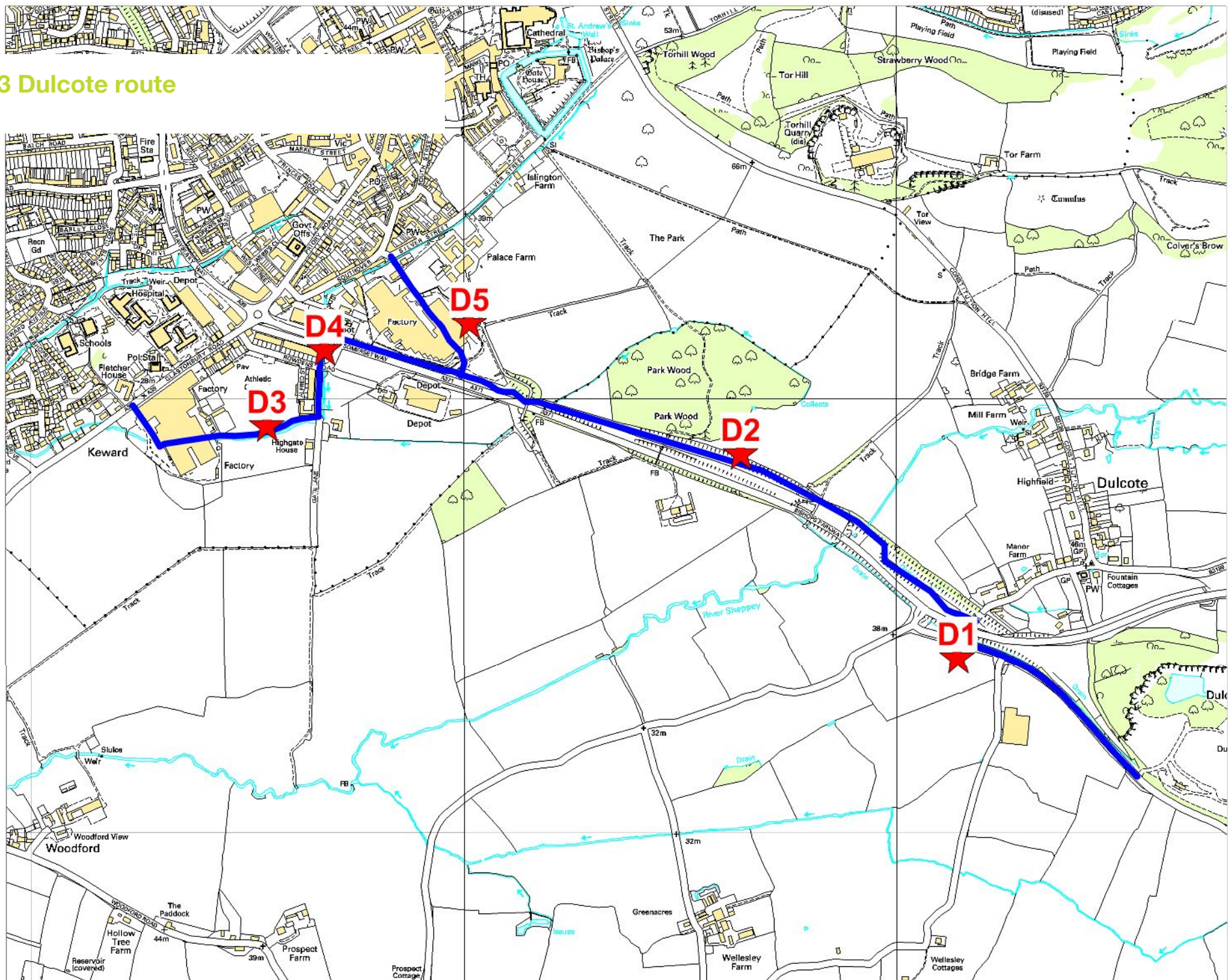
Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
2.2.1 South Horrington	T1	2.2.1.1.1 New 3 metre wide non-segregated path on north side of cricket ground. Use by cycles and pedestrians. (No construction required on driveway)	2.2.1.1.2 Legal—formalise use of path and driveway to estate entrance—right of way creation by agreement	Low
2.2.2 Junction with Bath Road	T2	2.2.2.1.1 Widen footways to 3 m and, 2.2.2.1.2 New path 3 m wide.	Landownership and stakeholder engagement.	Medium
2.2.3 Access point	T3	2.2.3.1.2 Path construction new 3 m wide path including bridge over stream.	2.2.3.1.1 Third party land acquisition.	High
2.2.4 Tor Hill and South Horrington path	T4	2.2.4.1.1 Clear drains to ensure free flow. 2.2.4.1.2 Surface full length of path 3 m wide with sealed surface. 2.2.4.1.3 Allocate car parking area near junction with Tor Street. 2.2.4.1.4 Install gate to prevent unauthorised vehicle access east of farm driveway.	Third party land permissions, change of status to formalise right to cycle	High

Future Network Mapping—Wells

2.2 Tor Hill and South Horrington Route

Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
2.2.5. Access from Bekynton Avenue and Barkham Close	T5	<p>2.2.5.1.1 Remove hedge and widen existing path to 3 m with vehicle deterrent at access point.</p> <p>2.2.5.2.2 Widen existing 1.2 m wide path to 3 m.</p>	<p>Third party land to widen path or agree that reduced width acceptable over short distance</p> <p>Formalise right to cycle</p>	Medium
2.2.6. Tor Street Crossing	T6	2.2.6.1.1 Build out to Tor Street, vehicle signage.	TRO	High

2.3 Dulcote route



Future Network Mapping—Wells

2.3 Dulcote route

2.3.0 Dulcote is a small outlying village east of Wells, but the former quarry near the village is an important development site with a planning permission for commercial development. The route is important for access from the village but will be of increasing importance as the quarry is developed.

2.3.0.1 Within the Wells urban area the route diverges to create direct links to the city centre from the future development sites south of Glastonbury Road and East Somerset Way.

2.3.1. Dulcote Quarry access D1

2.3.1.1 If development proceeds in the quarry there will inevitably be a significant increase in traffic on road (which also serves the local recycling depot) and an increased need for cycle access to Wells. As part of the planning permission granted for Dulcote Quarry a traffic free shared use path is to be provided alongside the highway and is an essential link in the strategic cycle network.

2.3.1.1.1 New shared use path to quarry entrance.

2.3.2. Dulcote path D2

2.3.2.1 The existing path is constructed with compacted stone over most of its length with the 300 m at the eastern end in tarmac, but with a width of approx 1.5 m. Maintenance since constructed has been intermittent and the compacted stone section is now in poor condition.

2.3.2.1.1 Surface full length of stone path with sealed surface 3 m wide.

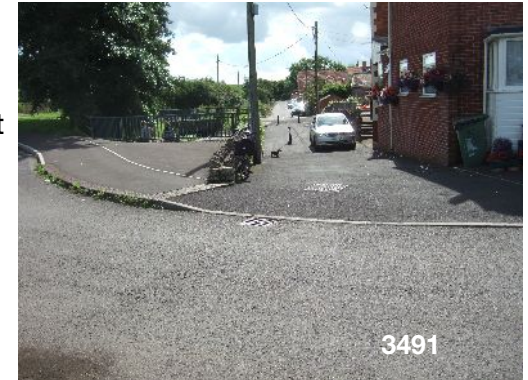
2.3.2.1.2 Widen sealed surface section to 3 m

2.3.3 Gate Lane D3

2.3.3.0 The former industrial site fronting Glastonbury Road is coming forward for development with access from Glastonbury Road. Conditions for cyclists on Glastonbury Road are poor and negotiating a major roundabout is necessary to reach the city centre. The route shown would link across the present Athletics Ground to the Glastonbury Road site and connect to the city centre by a route which would be less intimidating for less confident cyclists, if slightly longer.

2.3.3.1.1 Third party land or permissive access rights will be required.

2.3.3.1.2 New shared use path 3 m wide.



2.3.4. East Somerset Way crossing D4

2.3.4.1 Occupiers of the Cathedral Gate site south of East Somerset Way are separated from the city centre by a major road. The nearest pedestrian crossing is west of the roundabout at the south end of priory Road. For cyclists the only legal option is use of the East Somerset way and a difficult right turn at the roundabout. A more direct route to the centre is to cross



East Somerset Way from the section of Gate lane closed to traffic. (3491) At this point (3490) a crossing to the existing shared use footway on the north side of the road can be made using the ghost lane at the end of the right turn filter to Rowdens Road.

2.3.4.1.1 Refuge for crossing East Somerset Way.

2.3.5 Morrisons supermarket site D5

2.3.5.1 A link for walkers is included in the re-development of this site creating a more direct route from the city centre towards Dulcote. The supermarket site between East Somerset Way and Southover, which opened at the end of 2012, could provide a link for cyclists as well without any alteration to the existing provision for motor and foot traffic. It is also likely that the estate roads in any development will provide an acceptable route with little alteration.

2.3.5.2 Permission for cycles to use this route (between the shared use path on East Somerset way and Southover) across the supermarket roadway and Southover access should be formalised.

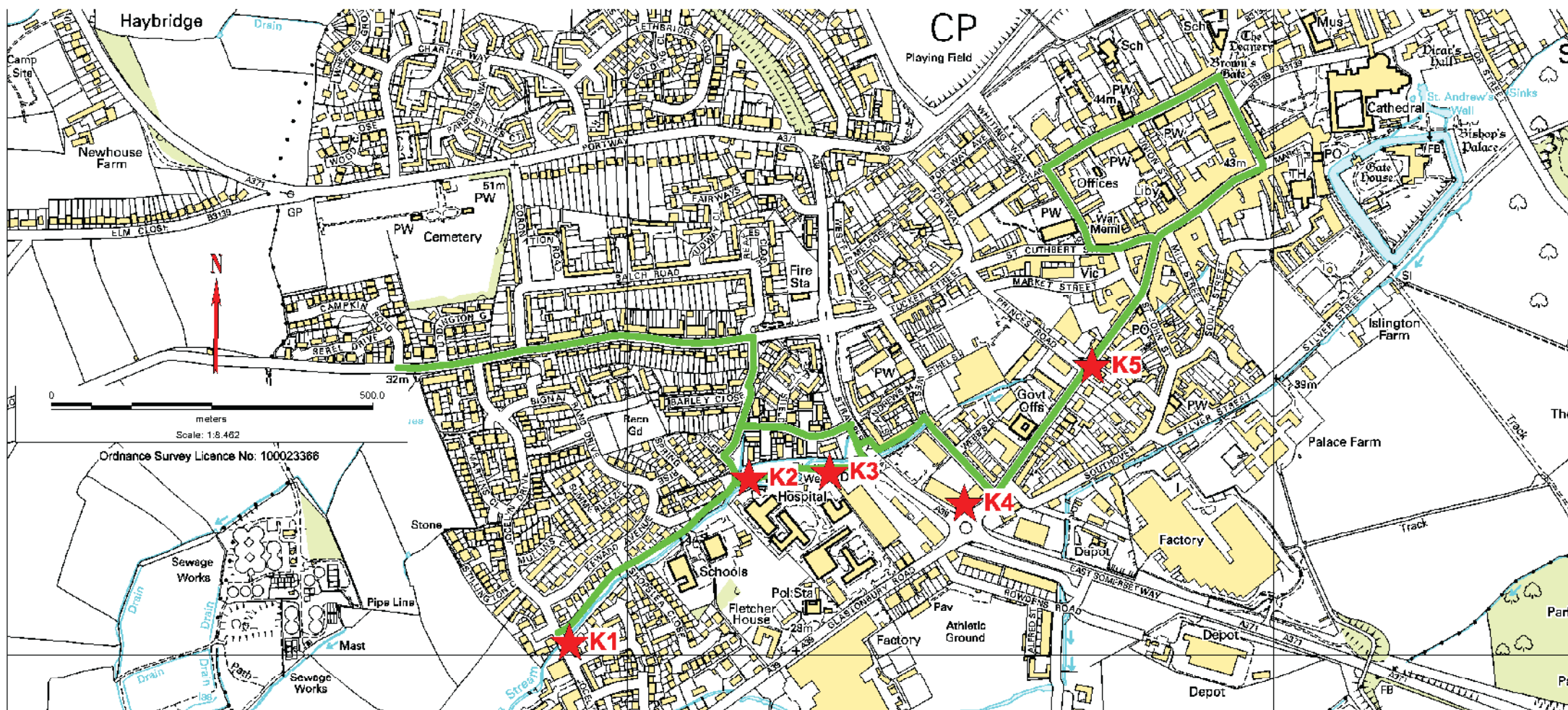
Future Network Mapping—Wells

2.3 Dulcote route

A route to serve future employment site and route to Dulcote and Glastonbury.

Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
2.3.1. Dulcote Quarry access	D1	2.3.1.1.1 New shared use path to quarry entrance.	Dependent upon development	Medium
2.3.2. Dulcote path	D2	2.3.2.1.1 Surface full length of stone path with sealed surface 3 m wide. 2.3.2.1.2 Widen sealed surface section to 3 m	Third party land or permissive access rights will be required.	Medium
2.3.3. Gate Lane, Wells	D3	2.3.3.1.2 New shared use path 3 m wide.	2.3.3.1.1 Legal—Third party land permissions	High
2.3.4. East Somerset Way	D4	2.3.4.1.1 Refuge for crossing East Somerset Way.	TRO	High

2.4 Keward route



Future Network Mapping—Wells

2.4 Keward route

2.4.0 The Keward route serves the population west of the central area. The route would be achieved by upgrading existing urban footpaths and improving conditions on the carriageway for cyclists

2.4.0.1 A major trip attractor in this area is the Health complex fronting Glastonbury Road. Glastonbury Road is very poor for cyclists and the only improvements which are potentially possible would be a shared use path on the south side of the road when the Nutricia site is developed, and a new pedestrian crossing near the complex entrance. The development of the Tincknell site as a Sainsbury store has been rejected, but it is reasonable to expect that a redevelopment of the site will emerge in the foreseeable future. If that is the case, an access to the Health complex should be secured to link to the cycle crossing on Strawberry Way, the focus of the main cross city routes.

2.4.0.1.1 The route diverges at Clements Close. The northern arm of the route, along Burcott Road carries little motor traffic and is suitable for cycling.

2.4.1 Keward Path K1

2.4.1.1 A path designated for shared use serves the cluster of houses



west of Bishopslea Close to Bishopslea Close, constructed to current standards as a segregated path. (3368) It links to both east and west to a footway which connects

Jocelyn Drive to Clements Close. The existing 1.8 m wide path should be widened to 3 m.

2.4.1.1.1 Widen existing path 1.8 m to 3 m.

2.4.2 Strawberry Way Link K2

2.4.2.1 The route connects to Clements Close on a new path constructed to the rear of a new house. This path opens the possibility of access to the potential development site (Tincknell) to the east, accessed over an existing culvert on the former railway formation. A route through the development, would link directly to Strawberry Way at the cycle crossing via a new bridge over the St Andrew's Stream.

2.4.2.1.1 New path 3 m wide through development site

2.4.2.1.2 New bridge, St Andrews Stream

2.4.2.1.3 New path on highway verge to crossing.

2.4.3 Health Complex Access K3

2.4.3.1 Current access for cyclists to the Health Complex is poor, the only option being the vehicle access on Glastonbury Road. The constraints in width and traffic volumes on Glastonbury Road minimise the opportunity for cycle provision on road, and footway widths are inadequate for shared use.

2.4.3.2 A prominent route for cyclists and pedestrians into the reception of the complex from the Tincknell site should be secured on any development, making a direct link to the Strawberry Way crossing, as this is the focal node of a number of routes across the city.

Future Network Mapping—Wells

2.4.3.2.1 New shared use path in new development

2.4.4 West Street / Priory Road Junction K4

2.4.4.1 The street layout, Tesco store and the bus station obstruct a direct route from West Street to the city centre, forcing the cyclist to go via Tucker Street or Priory Road. The latter is an attractive tree lined avenue, while Tucker Street is heavily trafficked with many vehicle movements to the Tesco car park. Tesco is directly accessible from West Street via a pedestrian access.



2.4.4.2 At the West Street / Priory Road junction (3487) the Keward route meets the Dulcote route. The footway on the east side of Priory Road should be designated as shared footway; no works are required as the width is between 3 and 4 metres. This transition point should be laid out to facilitate cyclists moving northwards crossing Priory Road from the Dulcote route; and southwards turning right into West Street.

2.4.4.2.1 Right turn filter approx. one metre wide for cycles on Priory Road.

2.4.5. Priory Road / Princes Street K5

2.4.5.1 Most traffic flows along Princes Street / Priory Road (3485). The Keward route follows Priory Road. Provision for right turning cyclists must be made at the junction where priority is with traffic turning into Princes Road. A right filter for cyclists should be

provided. Cyclists could be given some advantage travelling southwards by an advisory cycle lane leading to the junction with a new by pass through the deflector build-out.

2.4.5.1.1 Right filter for cyclists on Priory Road.

2.4.5.1.2 Advisory cycle lane Priory Road.



Future Network Mapping—Wells

2.4 Keward route:

Important direct commuter and utility route to city centre. Short term priority. Keward Path widening and on-carriageway works Priory Road; crossing of East Somerset Way.

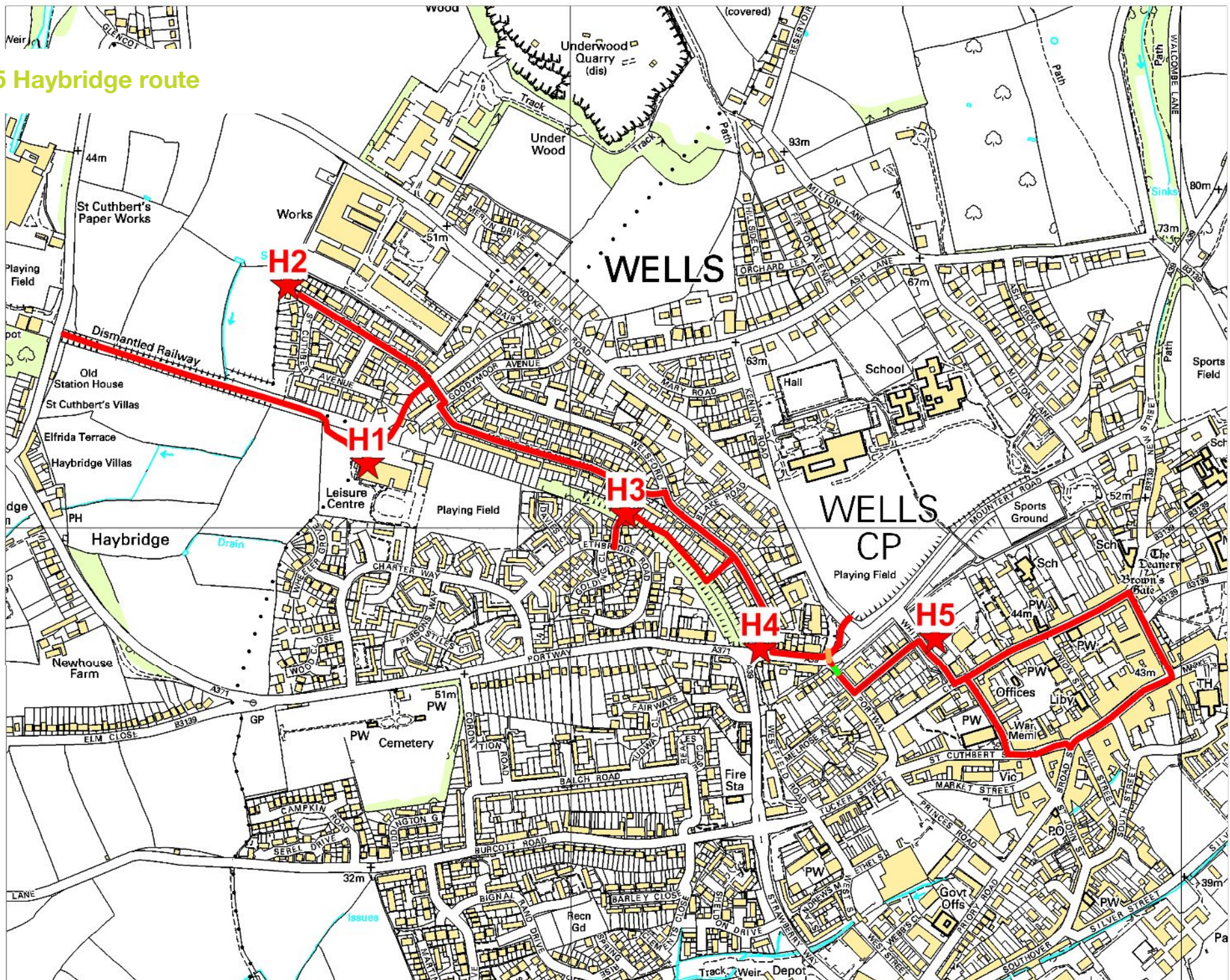
Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
2.4.1. Keward path	K1	2.4.1.1.1 Widen existing path 1.8 m to 3 m and install bollard.	Third party land formalise right to cycle	Medium
2.4.2. Strawberry Way Link	K2	2.4.2.1.1 New path 3 m wide through development site 2.4.2.1.2 New bridge, St Andrews Stream 2.4.2.1.3 New path on highway verge to non-signalised cycle crossing point on Strawberry Way	Subject to Planning.	Medium
2.4.3. Health Complex	K3	2.4.3.2.1 New shared use path in new development	Development of Tincknell site / planning permission	High
2.4.4. West Street / Priory Road junction	K4	2.4.4.2 Extend shared footway Somerset Way to Southover 2.4.4.2.1 Right turn filter for cycles Priory Road	Legal process for shared footway	High

Future Network Mapping—Wells

2.4 Keward route

Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
2.4.5. Priory Road / Princes Street	K5	<p>2.4.5.1.1 Right filter for cyclists on Priory Road.</p> <p>2.4.5.1.2 Advisory cycle lane Priory Road.</p>	<p>TRO</p> <p>Vehicle parking</p>	High

2.5 Haybridge route



Future Network Mapping—Wells

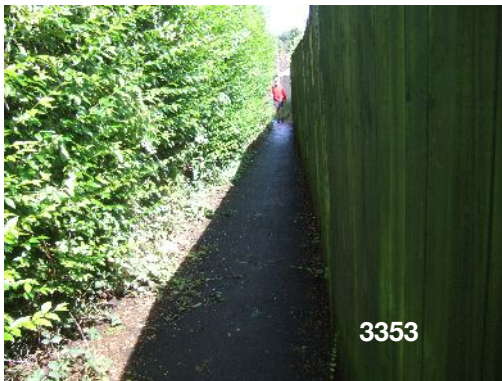
2.5 Haybridge route

2.5.0 The Mendip draft Core Strategy designates the area west of the urban area towards Haybridge for development in the plan period. It is important that development in this area caters for movement towards the centre by cycle (and on foot). The corridors available at present are Portway and Wookey Hole Road, the former especially is poor for cycling and the latter increasingly busy.

2.5.0.1 The use of the former railway cutting has long been an aspiration of the local development plan, but opportunities to access the cutting from either side are very restricted. If access can be achieved the Charter Way area will benefit from a much improved route into the centre of the city.

2.5.1 Leisure Centre H1

2.5.1.1 The shared use path to Haybridge was completed some years ago, connecting St Cuthberts Avenue and the Leisure Centre to Haybridge. Access to the Leisure Centre from the north could be improved by widening the existing footway southwards from St Cuthberts Avenue as a direct link.



2.5.1.1.1 Widen footway and convert to shared footway / cycleway.

2.5.1.1.2 Widen to St Cuthberts Avenue from 2 m to 3 m, including new culvert of drain alongside path. (3353, 3355)

2.5.1.1.3 Widen footway and convert to shared footway / cycleway.

2.5.1.1.4 Street lighting should be considered on this path for user security



2.5.2 St Cuthberts Avenue H2

2.5.2.1 An access is planned on public land for foot and cycle access to the Thales site. It is important that this access is retained for any development to the west. The Haybridge route will form the principal walking and cycling route into the centre.

2.5.3 Railway cutting H3

2.5.3.1 The current local development plan reserves the former railway line for a walking and cycling route. In the draft Mendip core strategy the corridor is a safeguarded corridor for sustainable transport. North of the playing field the former railway line is cultivated as gardens. A critical section north of Lethbridge Road appears not be cultivated as gardens and appears to provide the possibility of a good link between Lethbridge Road and Welsford Avenue. The base of the cutting is some distance below ground level and falls towards the city centre.

2.5.3.1.1 Dependent on future development, there appears to be the possibility of creating access points from Hope Close (off Lethbridge Road) and from the private garage court off Welsford Avenue. This would create a very useful link into the Haybridge route from the

Future Network Mapping—Wells

housing around Charter Way, avoiding the long diversion via Mount Pleasant Avenue which incurs a slight rise and fall, and avoiding the A371 Portway.

2.5.3.1.1.1 Legal— land to be provided to create route in cutting and accesses; subject to the planning process and further investigation of technical feasibility.

2.5.3.1.1.2 Vegetation clearance, earthworks and new path construction.

2.5.4 Portway crossing and Blue School access H4

2.5.4.1 Crossing the Portway between Welsford Avenue and the city centre is a critical element in the route. From observation this is clearly on the desire line for local cyclists.

2.5.4.1.1 The existing toucan crossing (3348) is well placed to serve journeys towards the school and Wookey Hole Road, and functions for pedestrians towards Welsford Avenue. Improving the crossing for cyclists depends on creating a length of shared footway by taking space from the highway. (3350) Catering for this movement for cyclists on the highway is not feasible and would be inconvenient, and consequently would not be used. The bus stop would need to be re-located towards the junction with Strawberry Way, which appears feasible without interfering with turning radii of large vehicles.

2.5.4.1.1.1 Widen footway from 2 m to 3 m between Portway toucan and pedestrian access to Welsford Avenue.

2.5.4.1.1.2 Re-model access Welsford Avenue (3349) remodel and improve visibility.

2.5.4.1.1.3 Relocate bus stop to west.

2.5.4.2 The existing crossing of Wookey Hole Road is a pelican (pedestrian light controlled) crossing. The existing school access on Kennion Road is close to a junction, with narrow footways and is heavily congested at peak times. No improvements for cycle access to the existing school gate on Kennion Road are feasible, but a large part of the school catchment could be better served by creation of a new access to the school close to the pelican crossing. The school playing fields about the road at this point, set above road level by 2—3 metres elevation. A ramp into the school field and a path to the school buildings would allow many pupils and staff to conveniently avoid the existing school entrance.

2.5.4.2.1 Upgrade pelican to toucan crossing

2.5.4.2.2 Clear vegetation and earthwork ramp to playing field level

2.5.4.2.3 Path on highway verge and in school field.



2.5.5 Portway and Whiting Way H5

2.5.5.1 For cyclists the most convenient route to the city centre is via Portway Avenue and Whiting Way. The existing footway link at the northern end of Portway Avenue (3521) could be widened and a crossing point designated in the ghost lane approach to the Whiting Way junction with Mountery Road (3523). Whiting Way is likely to attract increased traffic on the completion of the current development by Waitrose with the increased car parking adjacent. The footway on the north side of Whiting Way offers the opportunity for cyclists moving from the city centre and Chamberlain Street to avoid the traffic congestion and the mini-roundabout by designating shared use on the footway. The zebra crossing could be used to access Priest Row (with cycle contra-flow, see City Centre above). (3525)

2.5.5.1.1 Clear vegetation and widen footway access Portway Avenue

2.5.5.1.2 Refuge for crossing in ghost lane.

2.5.5.1.3 Widen 2 m footway near zebra on Whiting Way to 3 m.

2.5.5.1.4 Widen footway on north east corner of mini roundabout from 2.5 to 3 m.

2.5.5.1.5 Legal—designate shared use footways.



Future Network Mapping—Wells

2.5 Haybridge route:

Important direct commuter and utility route to city centre. Short term priority St Cuthberts Avenue to Whiting Way and Priest Row.

Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
2.5.1. Leisure Centre	H1	<p>2.5.1.1.1 Widen footway and convert to shared footway / cycleway in Leisure Centre grounds 1.2 m to 3 m. (2 m would be acceptable over short distance).</p> <p>2.5.1.1.2 Widen footway and convert to shared footway / cycleway to St Cuthberts Avenue from 2 m to 3 m, including new culvert of drain alongside path.</p> <p>2.5.1.1.3 Install lighting</p>	<p>Third party land</p> <p>Residents consultations</p>	Medium
2.5.4. Railway cutting	H3	<p>2.5.3.1.1 Legal—acquire land to create route in cutting and accesses; subject to the planning process and further investigation of technical feasibility .</p> <p>2.5.3.1.1.2 Vegetation clearance, earthworks and new path construction.</p>	Third party land	High

Future Network Mapping—Wells

2.5 Haybridge route:

Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
2.5.4. Portway crossing and Blue School access	H4	<p>2.5.4.1.1 Widen footway from 2 m to 3 m between Portway toucan and pedestrian access to Welsford Avenue.</p> <p>2.5.4.1.2 Re-model access Welsford Avenue (3349) remodel and improve visibility.</p> <p>2.5.4.1.3 Relocate bus stop to west.</p>	<p>TRO</p> <p>Consultation with bus operators and land ownership.</p>	High
2.5.5. Portway and Whiting Way	H5	<p>2.5.5.1.1 Clear vegetation and widen footway access Portway Avenue</p> <p>2.5.5.1.2 Refuge for crossing in ghost lane.</p> <p>2.5.5.1.3 Widen 2 m footway near zebra on Whiting Way to 3 m.</p> <p>2.5.5.1.4 Widen footway on north east corner of mini roundabout from 2.5 to 3 m.</p>	<p>2.5.6.1.5 Legal—designate shared use footways.</p> <p>2.5.6.1.6 Dependent upon introduction of Priest Row contra-flow.</p>	High

2.6 St. Thomas route



Future Network Mapping—Wells

2.6 St. Thomas route

2.6.0 The Tor Hill and South Horrington route (above) serves the population on the east side of the city, and many less confident cyclists will prefer the traffic free route despite, for some, the additional distance involved. For confident cyclists, especially in the area north of St Thomas Road and west of Hawker's Lane, the most convenient route to the centre is along St Thomas Street.

2.6.0. 1 St Thomas Street is relatively heavily trafficked and reportedly congested at peak times. The road width does not offer any possibility of segregated cycle provision but outside peak times the main disincentive for cyclists is traffic speeds (especially for cyclists travelling uphill leaving the city centre) and the difficulty for less confident cyclists in passing the parked cars (though parked cars tend to slow traffic as the road width does not allow two vehicles to pass comfortably alongside parked cars). (3471)



2.6.1 St Thomas Street ST1

2.6.1.1 The most effective encouragement to cycling on St Thomas Street would be restraining traffic speeds to 20 mph by extending the 20 mph limit from the city centre. Realign junction or consider traffic calming near Tor Street to improve cycling conditions in the carriageway.

2.6.1.1.1 Legal—20 mph limit from Hawker's Lane junction.

2.6.1.1.2 Potential junction realignment or traffic calming near Tor Street.

2.6.2 Tor Street Junction ST2

2.6.2.1 The road configuration of Tor Street and The Liberty tends to slow traffic at this junction and no special measures are required to cater for cyclists moving into or out of the city centre.

2.6.2.1.1 The pelican crossing at the south end of The liberty assists cyclists leaving the Cathedral Green but no special measures are necessary.(3476)



2.6.3 Cathedral Green ST3

Future Network Mapping—Wells

2.6.3.1 This section of St Thomas Street is very quiet and closed to traffic at the junction with Sadler Street. This route gives cyclists an advantage over motor borne travellers as being more direct and highly attractive. The only measures required to open this for cycling are the insertion of dropped kerbs at the Gatehouse entrance on Sadler Street. (3477)

2.6.3.1.1 Dropped kerb on Sadler Street



Future Network Mapping—Wells

2.6 St Thomas Street route:

Important direct commuter and utility route to city centre.

Section description	Map Reference	Intervention ID and Summary	Constraints	Impact
2.6.1. St Thomas Street—on highway interventions	ST1	<p>2.6.1.1.1 Legal—20 mph limit from Hawker’s Lane junction in bound.</p> <p>2.6.1.1.2 Potential junction realignment or traffic calming near Tor Street .</p>	<p>TRO</p> <p>Community consultation</p>	High
2.6.2. Tor Street junction	ST2	No action		
2.6.3. Cathedral Green - Sadler Street gate house access	ST3	2.6.3.1.1 Dropped kerb on Sadler Street.		High